

## Keeping the Lights On In Rural Minnesota

**The State of Minnesota** - Minnesota is known for its inclement weather. But even long-time residents were taken aback by the ferocity of such an early winter storm when it began Halloween night of 1991. First rain drenched southern Minnesota. Then the temperature dropped and it changed to ice and snow. The combination of 50-80 mph winds and precipitation with temperatures ranging from 20 to 30 degrees F, created hazardous and damaging ice conditions.

"The winds were so strong the ice froze perpendicular," said Dave Lundberg, Finance Division Manager for Steele-Waseca Cooperative Electric, Owatonna, Minnesota. "We experienced three million dollars in damages and people were without power for a week. Once temporary repairs were made, a five year replacement plan began."

The loss of power to farmers and rural residents can be disastrous in regards to both economics and safety. Steele-Waseca Cooperative Electric (SWCE) provides electrical power to over 7800 rural customers with 1920 miles of line, covering an area of 900 square miles in nine surrounding counties in Southeast and South-central Minnesota. SWCE, like all Minnesota rural electric co-ops, is owned by its membership: the rural customers the utility serves with electrical power.

"The rural areas are more susceptible to power outages than suburban and urban areas," said Mark Glaess, manager, Minnesota Rural Electric Association (MREA). "Animal husbandry is dependent on electricity, especially for ventilation. Without proper ventilation, the animals can die and a farmer can lose his whole operation. Also, the rural population is more aged than urban and suburban areas and are more dependent on electricity for medical purposes."

Rural cooperatives operate over a much larger distance than municipal power companies, and with far less revenue per mile of line. Because the cooperatives average only six customers per mile of line (SWCE averages four per mile) as compared to an average of forty per mile for municipal utilities, costly repairs can mean much higher rates for rural residents, who statistically earn less than the state's average per capita income.

The 1991 Halloween storm damaged several miles of SWCE power lines. With the cooperation of MREA and its co-ops, 125 line workers drove 60 additional utility trucks to the area from all parts of the state to help repair the lines. Farmers aided line workers by clearing snow to the power lines and towing utility trucks out of snowdrifts. The Minnesota Division of Emergency Management (DEM) coordinated FEMA mitigation funding for the SWCE utility projects. The mitigation projects met one of the core values of the DEM: to create a sustainable community that is resistant to the human and economic cost of disasters. FEMA's Hazard Mitigation Grant Program (HMGP) is a cost share program activated by federally declared disasters.

In ongoing FEMA mitigation funding and repair work since the 1991 storm, \$2.2 million has been spent on infrastructure projects and \$611,231 spent in HMGP grant funds.



Multiple Counties, Minnesota







## **Quick Facts**

Year:

1991

Sector:

Private

Cost:

**Amount Not Available** 

Primary Activity/Project:

**Utility Protective Measures** 

Primary Funding:

**Local Sources**